

Appl. No.: 10/578,962
Amdt. dated April 30, 2009
Reply to Office Action of March 30, 2009

REMARKS/ARGUMENTS

Amendments to the Claims

Applicants have cancelled claim 56 without prejudice or disclaimer. Applicants expressly reserve the right to file one or more continuing applications directed to the subject matter of the cancelled claim and/or of any other claims that may be amended and/or cancelled during the prosecution of the instant application.

Applicants have amended claim 44 to change claim dependency to claim 36. Support for this amendment can be found in the specification and original claims, particularly original claim 44, which had previously depended from any one of claims 17 to 43 prior to its amendment to depend solely on claim 17 upon entry into the U.S. National Stage.

No new matter has been added by way of amendment of the claims.

Claims 1-55 and 57 are pending.

Response to the Restriction Requirement

In the Office Action, the Examiner has required restriction between Group I, namely Claims 3-5 and 13, Group II, namely Claim 6, Group III, namely Claims 7 and 8, Group IV, namely Claim 9, Group V, namely Claims 21-28, Group VI, namely Claims 29 and 30, Group VII, namely Claim 35, Group VIII, namely Claims 36-38, Group IX, namely Claims 39-42 and 48, Group X, namely Claim 43, Group XI, namely Claims 44 and 45, Group XII, namely Claim 46, Group XIII, namely Claim 49, Group XIV, namely Claims 52 and 54, Group XV, namely Claim 53, Group XVI, namely Claim 55, Group XVII, namely Claim 56, and Group XVIII, namely Claim 57.

Applicants hereby provisionally elect with traverse to prosecute the claims of Group XI (Claims 44 and 45) and expressly reserve the right to file divisional applications or take such other appropriate measures deemed necessary to protect the inventions in the remaining claims.

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In response to the restriction requirement, Applicants have also amended claim 44 to change claim dependency to claim 36. In view of this claim amendment and in further view of the provisional election, Applicants believe that the elected invention encompasses claims 17-20, 31-34, 36, 44, 45, 47, 50, and 51.

Applicants respectfully disagree with the Restriction Requirement because the application, in contrast to the position stated the Office Action, does not lack unity of invention for the reasons set forth below. Therefore, Applicants respectfully request that the Examiner reconsider the requirement for restriction and examine all of the claims together in the present application.

The Office Action indicates that the inventions of Groups I-XVIII do not relate to a single general inventive concept under PCT Rule 13.1 because under PCT Rule 13.2, the inventions of Groups I-IX lack the same or corresponding technical features. The Office Action indicates on page 10 that the technical feature linking the inventions of Groups I-XVIII is a nucleic acid molecule containing a DNA sequence encoding an RNA replicon wherein said replicon contains sequences for replication function derived from a plant RNA virus and a sequence of interest to be expressed from said replicon. The Office Action indicates that Mallory *et al.* (Nature Biotechnology, 2002, vol. 20, pp. 622-625) teaches a nucleic acid molecule containing the potato virus X replicon carrying a gene of interest and alleges that the technical feature linking the invention of Groups I-XVIII does not constitute a special technical feature as defined by PCT Rule 13.2 as it does not constitute a special technical feature over the prior art.

The Examiner appears to have misunderstood Applicants' claimed invention. All of the pending independent claims (i.e., claims 1, 17, 36, and 57) include the recitation, "whereby said sequences for replicon function exhibit at selected localities of said sequence of said plant RNA virus function-conservative differences from said sequence of said plant RNA virus, said differences causing an increased frequency of replicon formation compared to an RNA replicon not exhibiting said differences." Thus, the inventions of Groups I-XVI and XVIII share the same or corresponding technical feature, namely, "sequences for replicon function [that] exhibit at

selected localities of said sequence of said plant RNA virus function-conservative differences from said sequence of said plant RNA virus, said differences causing an increased frequency of replicon formation compared to an RNA replicon not exhibiting said differences.” Mallory *et al.* does not disclose or suggest a plant or plant expression process, wherein a plant is provided with a heterologous DNA sequence having a sequence encoding an RNA replicon operably linked to a promoter as further defined in the claims and fulfilling the feature recited above. Accordingly, the instant application as amended herein meets the unity of invention requirement of PCT Rule 13.1.

In contrast to the present invention, Mallory *et al.* describes crossing of two plants, one being an amplicon transgenic line and one being a HC-Pro-expressing line. There is no indication that the sequences for replicon function of the amplicon expressing line of Mallory *et al.* have function-conservative differences from the sequence of the plant RNA virus from which the RNA replicon is derived. Therefore, the amplicon transgenic line of Mallory *et al.* does not anticipate any of the independent claims containing the feature recited above.

The HC-Pro-expressing line of Mallory *et al.* contains a transgene composed of the 5' proximal region of the TEV genome, which encodes a polyprotein containing the viral proteins P1 and HC-Pro as well as a small portion of P3 (page 623, sentence bridging left and right column). There is no indication that the HC-Pro-expressing line of Mallory *et al.* contains a heterologous DNA encoding an RNA replicon. There is further no indication of sequences for replicon function that exhibit function-conservative differences from the sequence of the plant RNA virus from which an RNA replicon is derived. Thus, the HC-Pro-expressing line of Mallory *et al.* does not anticipate any of the independent claims containing the feature recited above.

For the above reasons, Applicants submit that the Restriction Requirement is improper and should be withdrawn because the instant application relates to a single general inventive concept under PCT Rule 13.1 and therefore, satisfies the requirement of unity of invention. Accordingly, Applicants respectfully request that the Examiner examine all of the pending claims together in the instant application.

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Should the Examiner have further questions or comments with respect to examination of this case, it is respectfully requested that the Examiner telephone the undersigned so that further examination of this application can be expedited.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fee required therefor (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

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